

**UNITED STATES DISTRICT COURT  
FOR THE WESTERN DISTRICT OF TEXAS  
WACO DIVISION**

SOLAS OLED LTD.,  v.  DELL INC.,	<i>Plaintiff,</i>   <i>Defendant.</i>	Case No. 6:19-cv-00514-ADA
SOLAS OLED LTD.,  v.  GOOGLE LLC,	<i>Plaintiff,</i>   <i>Defendant.</i>	Case No. 6:19-cv-00515-ADA
SOLAS OLED LTD.,  v.  APPLE INC.,	<i>Plaintiff,</i>   <i>Defendant.</i>	Case No. 6:19-cv-00537-ADA
SOLAS OLED LTD.,  v.  HP INC.,	<i>Plaintiff,</i>   <i>Defendant</i>	Case No. 6:19-cv-00631-ADA

**SOLAS’S REPLY CLAIM CONSTRUCTION BRIEF<sup>1</sup>**

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<sup>1</sup> The captioned cases are consolidated for claim construction briefing and hearing. Thus, Solas will file an identical copy of its claim construction papers in those cases.

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1	Declaration of Richard A. Flasck in support of Solas’s opening claim construction brief	Flasck. Decl.
2	U.S. Patent No. 6,072,450	’450 patent
3	U.S. Patent No. 7,447,338	’338 patent
4	U.S. Patent No. 7,573,068	’068 patent
5	U.S. Patent No. 7,499,042	’042 patent
6	U.S. Patent No. 7,663,615	’615 patent
7	Parties’ joint revised list of terms/constructions served June 12, 2020	Joint Chart
8	The Authoritative Dictionary of IEEE Standards Terms (7th ed. 2000) (“IEEE Dictionary”), definitions of “drain,” “source,” “select,” and “substrate”	IEEE Dict.
9	Microsoft Computer Dictionary (3rd ed., 1997), definition of “signal” and “scan line”	MS Dict.
10	McGraw-Hill Dictionary of Scientific and Technical Terms (4th ed., 1989), definitions of “data transmission line,” “source,” “drain,” and “selection circuit”	McGraw-Hill
11	Merriam-Webster Dictionary (avail. at <a href="http://www.merriam-webster.com">www.merriam-webster.com</a> , accessed May 2020), definitions of “select,” “selection,” “sequential,” and “series.”	Merriam-Webster
12	Dictionary.com (avail. at <a href="http://www.dictionary.com">www.dictionary.com</a> , accessed May 2020), definitions of “period,” “section,” “sequence,” and “sequential”	Dictionary.com
13	Oxford Concise Dictionary (12th ed., 2011), definitions of “period” and “section”	Oxford Concise
14	Claim Construction Memorandum and Order from <i>Solas OLED Ltd. v. Samsung Display Co., Ltd.</i> , 2:19-CV-00152-JRG, Dkt. 99 (E.D. Tex. Apr. 17, 2020)	Samsung Markman
15	Claim Construction Order from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 82, Case 6:19-cv-00236-ADA (W.D. Tex. June 9, 2020)	LG/Sony Markman
16	Parties’ Joint Claim Construction Statement from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 76, Case 6:19-cv-00236-ADA (W.D. Tex. May 1, 2020)	LG/Sony JCC

<sup>2</sup> Exhibits 1–22 were submitted with Solas’s opening claim construction brief. Exhibits 23–25 were submitted with Solas’s responsive brief. Exhibit 26 is submitted with this reply brief.

17	HP's proposed claim constructions, Case No. 6:19-cv-00631-ADA, served May 22, 2020	HP's Proposed Constructions
18	Solas's Disclosure of Asserted Claims and Infringement Contentions Against Samsung, Case No. 2:19-cv-00152-JRG (E.D. Texas), Oct. 7, 2019	Samsung Contentions
19	Apple's proposed terms for construction, Case No. 6:19-cv-00537-ADA, served Apr. 30, 2020	Apple's Proposed Terms
20	Apple's proposed claim constructions, Case No. 6:19-cv-00537-ADA, served May 22, 2020	Apple's Proposed Constructions
21	Excerpts of transcript of April 14, 2020, Telephonic Motion Hearing from <i>Solas v. Dell and Google</i> , Case Nos. 6:19-cv-00514-ADA, 6:19-cv-00515-ADA.	Motion Hearing Tr.
22	The New Oxford American Dictionary, Second Edition (2005)	New Oxford American Dictionary
23	Declaration of Richard A. Flasck in support of Solas's responsive claim construction brief	Flasck Resp. Decl.
24	Excerpts of the April 13, 2020 deposition transcript of Douglas R. Holberg from <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 82, Case 6:19-cv-00236-ADA	Holberg Dep.
25	Patent Owner's response to supplemental pre-institution brief, IPR2020-00320, Paper 8, dated May 11, 2020	Solas Pre-inst. Br.
26	Excerpts from Defendants LG and Sony's responsive claim construction brief in <i>Solas OLED Ltd. v. LG Display Co., LG Elec., Inc., and Sony Corp.</i> , Dkt. 71, Case 6:19-cv-00236-ADA	LG Resp. Br.

## I. DISPUTED TERMS FOR '338 PATENT

### A. “transistor array substrate” ('338 patent claims 1, 4)

Solas's Proposed Construction	Defendants' Proposed Construction
layered structure upon which or within which a transistor array is fabricated	a layered structure <u>composed of a bottom insulating layer through a topmost layer on whose upper surface pixel electrodes are formed</u> , which contains an array of transistors

Defendants' responsive brief focus less on the substance and more on purported inconsistencies in Solas's positions. Defendants also argue there is “important new evidence that supports Defendants' proposed construction.” Defs. Resp. at 1–2. Defendants' arguments are wrong-headed and Solas has an easy response. In the Eastern District and IPR proceedings, Solas and Samsung discussed compromise constructions to narrow the specific disputes and issues in those proceedings. Those discussions occurred *before* Judge Gilstrap construed “transistor array substrate.” Now, Solas believes Judge Gilstrap's construction should be adopted. At a minimum, adopting it would ensure that consistent constructions are being applied against Defendants' accused products and Intervenor Samsung who supplies key components for those products.

In the Eastern District of Texas before Judge Gilstrap, Solas filed a Notice of Agreement agreeing to Samsung's proposal *not* because Solas agreed with the substantive correctness of Samsung's construction but “to streamline the disputed issues of claim construction presently before the Court.” Defs. Ex. AA06 at 1. That Solas sought to narrow disputes in that case isn't disclaimer about the proper scope of “transistor array substrate.” And it certainly doesn't give rise to estoppel. This is especially true where, as Judge Gilstrap concluded, Samsung's and Defendants' proposal was unsupported by specification and the extrinsic evidence. *See* Samsung Markman at 10–15. Solas agrees with Judge Gilstrap's reasons for rejecting Defendants' proposal.

Defendants’ argument about the IPR proceedings involving the ’338 patent initiated by Samsung is similarly unavailing. Solas simply stated in its IPR pre-institution brief that it agreed to the construction and cited the Eastern District Notice of Agreement. While “statements made by a patent owner during an IPR proceeding . . . can be relied upon to support a finding of prosecution disclaimer” (*Aylus Networks, Inc. v. Apple Inc.*, 856 F.3d 1353, 1364 (Fed. Cir. 2017)), Solas did not make any statements that constitute clear and unmistakable disclaimer of claim scope here. Nor do the facts show any reason to bind Solas.

This is evidenced by the full context of Solas’s IPR pre-instruction brief. Solas never said Samsung’s proposal is correct. Solas didn’t need to because it didn’t that believe Samsung’s asserted prior art disclosed the disputed limitation even under Samsung’s proposed construction. *See* Defs. Ex. AA06 at 27–28 (“Applying [Samsung’s construction] to their mapping below, it is easy to see precisely how Samsung’s theory cannot hold up.”). Solas wanted to narrow the disputes to show why Samsung’s invalidity argument was wrong.

Defendants then contend, about the “containing an array of transistors” aspect of their proposal, that what makes this case different from the case before Judge Gilstrap is Defendants’ emphasis on the claim language. *See* Defs. Resp. at 3–4 (“Defendants respectfully submit that the claim language of the ’338 Patent is decisive . . .”). Specifically, Defendants point to the ’338 patent claims’ requirement that the “transistor array substrate . . . comprises a plurality of transistors.” Defs. Br. at 2. This argument does not help Defendants.

As Solas explained in the responsive brief, if the Court believes repeating the “comprising a plurality of transistors” portion of the claim would clarify the meaning of the disputed term, Solas would not object to such clarification. But the claims’ use of the phrase “comprising a plurality of transistors” doesn’t support Defendants’ construction, which injects a separate

limitation, “containing,” into the claims where the claims themselves only require that the transistor array substrate “comprise” a plurality of transistors. A POSITA would not have understood the words “containing” (not in the claims) and “comprising” (present in the claims) to be identical as Defendants imply. After all, the ’338 patent specification uses “comprise” and “contain” differently and in different contexts—a point which Defendants ignore. *Compare*, ’338 patent, at 2:38, 3:10, 15:20, *with* 10:59 11:42, 12:17, 12:55–12:16, 13:45.

Defendants’ other arguments based on the specification amount to the same arguments considered and rejected by Judge Gilstrap. Defendants’ emphasis on the limiting effect of the terms “is” and “i.e.” is unavailing for the reasons in Solas’s responsive brief in Judge Gilstrap’s claim construction order. *See* Solas Resp. at 2–3; Samsung Markman at 13–14.

Nor does Defendant’s final argument—that “multiple different combinations of layers in a single device could alternatively be considered to be a ‘transistor array substrate’” (Defs. Resp. at 5)—support their construction. This argument amounts to a complaint that Solas’s construction could be mapped onto accused products in more than one way—which, even if true, is no reason to limit the scope of the claims. *See* Solas Resp. at 2; *see also Vivid Techs., Inc. v. Am. Sci. & Eng’g, Inc.*, 200 F.3d 795, 803 (Fed. Cir. 1999) (“[C]laims are construed objectively and without reference to the accused device[.]”).

**B. “project from a surface of the transistor array substrate” (’338 patent claim 1)**

Solas’s Proposed Construction	Defendants’ Proposed Construction
extend from an external surface of the transistor array substrate	extend <b>above the upper surface</b> of the transistor array substrate

Defendants’ responsive arguments largely repeat what intervenor Samsung’s already argued unsuccessfully to Judge Gilstrap. Defendants’ response brief spends nearly two pages discussing the same specification language and patent figure presented to Judge Gilstrap (in and



Defendants’ opening brief) to argue that the only “surface” from which a transistor can project in the context of the ’338 patent is an “upper” surface.” *See* Defs. Resp. at 5–7. This argument isn’t supported by sufficient evidence to overcome the prohibition against importing limitations from the specification into the claims. *JVW Enterprises, Inc. v. Interact Accessories, Inc.*, 424 F.3d 1324, 1335 (Fed. Cir. 2005) (courts “do not import limitations into claims from examples or embodiments appearing only in a patent’s written description ... unless the specification makes clear that the ‘patentee ... intends for the claims and the embodiments in the specification to be strictly coextensive.”) (quoting *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005)).

Defendants’ final point implies that Judge Gilstrap declined to apply the “upper” term as Samsung requested because it believed “upper” lacked sufficiently clear meaning in the context of the claims. *See* Defs. Resp. at 6–7. This is incomplete. Judge Gilstrap rejected Samsung’s invitation *also* because its citations to the specification did not “justify limiting the disputed term to one particular outer surface rather than any outer surface.” Samsung Markman at 18.

The same weakness pervades Defendants’ arguments here. Indeed, Defendants here have not disputed Judge Gilstrap’s conclusions except with attorney argument unsupported by evidence. Likewise, Defendants’ argument that an “interconnection cannot project upward and extend beyond any outer surface other than the upper surface” is allegedly contradicted by “the very construction that Solas advances, which requires the interconnections to ‘extend beyond the outer surface of the transistor array substrate’” is wrong. Defs. Resp. at 7. This argument is irrelevant because it attacks the construction that Solas requested in the Eastern District of Texas but Judge Gilstrap declined to adopt. Now, in this case: Solas is requesting that the Court adopt the construction that Judge adopted for this term.

## II. DISPUTED TERMS FOR '068 PATENT

### A. “signal lines” / “supply lines” ('068 patent claims 1, 13)

Term	Solas’s Proposed Construction	Defendants’ Proposed Construction
“signal lines”	conductive lines supplying signals	conductive lines <u>carrying data</u>
“supply lines”	conductive lines supplying current or voltage	conductive lines, <u>each</u> supplying a <u>driving</u> current or voltage to a <u>plurality of pixel circuits</u>

Defendants’ responsive brief merely rehashes arguments from the opening brief. The crux of Defendants’ argument is that “different claim terms are presumed to have different meanings.” *Helmsderfer v. Bobrick Washroom Equip., Inc.*, 527 F.3d 1379, 1382 (Fed. Cir. 2008). Defendants’ repeat this argument on nearly every page of their briefing. *See* Defs. Resp. at 30, 32; Defs. Br. at 29–30. But it fails for simple reasons. First, Solas’s proposals for “signal lines” and “supply lines” *are* different, so claim differentiation doesn’t apply. Indeed, there is zero tension the two constructions, as the Court recognized by adopting them in the LG case where defendants made the same claim differentiation argument. *See* LG Resp. Br. at 27 (LG/Sony arguing that “different claim terms are presumed to have different meanings,” so “signal lines” must have a meaning different from the agreed-construction of “supply lines”).

Second, Defendants’ argument does nothing to show that Solas’s proposals are incorrect or that Defendants’ proposals are correct. Solas provides un rebutted evidence that its proposals are the plain meanings of “signal lines” and “supply lines.” In contrast, Defendants’ proposals are *not* the plain meanings, and there is no evidence the patentee intended to redefine the terms.

“*signal lines*”—Solas’s proposal, “conductive lines supplying signals,” is the plain meaning. *See* Flasck Decl. ¶¶ 95–96 (citing *Microsoft Computer Dictionary*). The ’068 patent uses the term in the ordinary sense. It describes *signals* (such as a “current signal”) being *supplied* to signal lines. *See* ’068 patent at 1:38–45, 16:14–21. In contrast, Defendants’ proposal, “conductive

lines carrying data” sounds more like a reference to “data lines.” Nowhere does the ’068 patent equate signal lines with “data lines” or describe signal lines as lines for “carrying data.”

“*supply lines*”—Again, Solas’s proposal, “conductive lines supplying current or voltage,” is the plain meaning. Defendants don’t argue otherwise. Nor do they suggest that their proposal, “conductive lines, each supplying a driving current or voltage to a plurality of pixel circuits,” is the plain meaning of anything. Instead, Defendants’ arguments are based on mischaracterizing the specification and violating Federal Circuit law.

As Solas’s demonstrated, the specification describes supply lines carrying various currents or voltages, such as “write currents,” “current signals,” and “clock signals”—*none* of which are characterized as “driving” currents or voltages. *See* Solas Br. at 14; Solas Resp. Br. at 6. Defendants acknowledge this. *See* Defs. Resp. at 31. But Defendants argue their construction is correct because supply lines “can *also*” supply a driving current and their construction is not limited to “*only*” a driving current. *See id.* This makes no sense. Claim construction is about requirements. Defendants’ construction *requires* a “driving” current or voltage and *excludes* other currents and voltages. That’s why Defendants’ proposal for “signal lines” must be rejected. It is contradicted by—and would exclude—various other signal lines described in the specification.

Defendants’ additional requirement that “each” supply line operate with a “plurality of pixel circuits” is unsupported. There is zero evidence the patentee intended to relinquish claim scope in such this way. Defendants’ cited cases (*see id.* at 32) are inapposite and in no way undermine the Federal Circuit’s prohibition against importing embodiments.

In *Regents of Univ. of Minnesota*, the claims, specification, and prosecution history all supported a narrow construction. *Regents of Univ. of Minnesota v. AGA Medical Corp.*, 717 F.3d 929, 935–36 (Fed. Cir. 2013). And critically, the specification’s use of “the present invention”

operated as disclaimer. *Id.* at 936. In *ICU Medical*, the adopted construction was the plain meaning, and “ICU offer[ed] no support from any intrinsic or extrinsic source” that the plain meaning was broader. *ICU Medical, Inc. v. Alaris Medical Systems, Inc.*, 558 F.3d 1368, 1375 (Fed. Cir. 2009). Neither case is remotely applicable to terms or intrinsic evidence here.

**B. “formed on said plurality of supply lines along said plurality of supply lines” (’068 patent claim 1) / “connected to said plurality of supply lines along said plurality of supply lines” (’068 patent claim 13)**

Term	Solas’s Proposal	Defendants’ Proposal
“formed on said plurality of supply lines along said plurality of supply lines”	<u>formed on</u> said plurality of supply lines <u>over the length or direction of</u> said plurality of supply lines	<u>stacked on or making multiple contacts with</u> said plurality of supply lines <u>over the length of each supply line</u>
“connected to said plurality of supply lines along said plurality of supply lines”	<u>connected to</u> said plurality of supply lines <u>over the length or direction of</u> said plurality of supply lines	

Defendants’ responsive brief is full of flawed arguments. *First*, Defendants argue their language “stacked on or making multiple contacts with” is justified because it reflects their own descriptions of two exemplary embodiments. *See* Defs. Resp. at 26 (describing the “stacked” embodiment and the “grid” embodiment). But claim construction should be rooted in the intrinsic and extrinsic evidence. It doesn’t permit a defendant to make up its own descriptions of embodiments and then import them into the claims. Nowhere does the patent define “formed on” or “connected to” to mean “stacked on.” And the phrase “making multiple contacts with” appears nowhere in the claims, specification, or prosecution history. Thus, Defendants’ proposal “violates nearly every tenet of claim construction and amounts to a wholesale [] rewriting of the claim.” *Source Vagabond Sys. Ltd. v. Hydrapak, Inc.*, 753 F.3d 1291, 1301 (Fed. Cir. 2014).

Solas’s proposal, in contrast, is the plain meaning of the terms and consistent with every embodiment. The language “over the length or direction of,” for example, is rooted in the

specification. *See* '068 patent at 6:2–6 (stating that feed interconnections and its common connections are provided “*in parallel to*” the supply lines), 23:1–6 (same). Defendants imply—without any actual argument or evidence—that contacts over less than the entire length of the supply lines would be non-enabled. *See* Defs. Resp. at 27. This empty assertion is entitled to no weight. And, Solas’s proposal is fully enabled. At least Figs. 21 and 22 and their descriptions show feed interconnects formed on / connected to “over the direction of” supply lines.

*Second*, Defendants’ arguments against Solas’s proposal are unavailing. *See* Defs.’ Resp. at 27–28. Defendants’ criticize Solas for focusing on the term “along,” but the meaning of that term is precisely what is disputed in the parties’ proposals (just as it was in the LG case). And dictionary definitions are instructive because the claim term uses “along” in the same way as it is used in English. Defendants do not and cannot dispute this.

Instead, Defendants rely heavily on an obvious typo in Solas’s opening brief. *See* Defs. Resp. at 27. But of course a POSITA **would** understand that feed interconnections are formed or connected to the supply lines over the length of direction of the supply lines. This is exactly what Mr. Flasck states in the cited paragraph of his declaration. *See* Solas Br. at 14 (citing Flasck Decl. ¶ 86). And Solas’s entire argument is about why its proposed construction is correct.

*Third*, Defendants’ argument for assigning the *identical* construction to “formed on” (in claim 1) and “connected to” (in claim 13) fails. *See* Defs. Resp. at 28. The '068 patent uses the terms in their ordinary sense, and they have different meanings in plain English. For example, “connected” implies joined or linked, whereas “formed” implies shaped or arranged. Feed interconnections can be “connected to” supply lines without being “formed on” them. Indeed, Defendants themselves argue that “distinct terms are presumed to have different meanings.” Defs. Resp. at 30. But this contradicts their identical proposal for “formed on” and “connected to.”

Defendants’ remaining arguments are about importing features or benefits from exemplary embodiments and were already rejected in the LG case. *See* Defs. Resp. at 29–30. They are also contrary to Federal Circuit law. As to Defendants’ requirement that feed interconnects be over the length of “*each* supply line,” Defendants hardly mention it. Their only support is an out-of-context statement from Mr. Flasck. *See id.* at 30. But in the very paragraph Defendants cite, Mr. Flasck was actually explaining the claimed relationship between feed interconnects (plural) and supply lines (plural). Flasck Decl. ¶ 90 (“The claim language refers to pluralities”). This undermines Defendants’ proposal, which imposes requirements about individual interconnections or lines. *Id.*

**C. “source” / “drain” (’068 patent claims 1, 5, 12, 13, 17)**

Term	Solas’s Proposed Construction	Defendants’ Proposed Construction
“source”	Plain and ordinary meaning	source <u>electrode</u>
“drain”	Plain and ordinary meaning	drain <u>electrode</u>

The Court is not required to construe the common technical terms “source” and “drain.” *See* Flasck Decl. ¶¶ 96–102. As the Federal Circuit instructed, “there are limits to the court’s duties at the claim construction stage. For example, courts should not resolve questions that do not go to claim scope, but instead go to infringement, or improper attorney argument.” *Eon Corp. IP Holdings v. Silver Spring Networks*, 815 F.3d 1314, 1319 (Fed. Cir. 2016). Although it’s unclear what Defendants are doing, it appears they want to add extra words to the claim so they can later interpret those words to argue for non-infringement. This is improper. At a minimum, Defendants haven’t articulated a clear dispute over claim scope that requires resolution by the Court.

Defendants’ briefing is full of shifting positions and arguments. Defendants began by asserting “disclaimer by implication” but then abandon that argument. Defendants proposed construction was “source / drain electrode” but then concede that “electrode” requires clarification.

For the first time in response—and months after the deadline to disclose extrinsic evidence—Defendants add three dictionary definitions for “electrode.” *See* Defs. Resp. at 33 n. 8. Defendants then imply that electrode means “conductor.” But just like the word “electrode,” the ’068 patent never says “source conductor” or “drain conductor.”

Finally, in contrast to everything they say previously, Defendant propose a new **20-word** construction based on a lengthy *explanation* from Mr. Flasck’s declaration. *See id.* at 34. But Mr. Flasck never proposed that as a construction. His entire point was that “source / drain” are (a) common terms that a POSITA would understand and (b) not limited to an “electrode.” *See* Flasck Decl. ¶ 101. It is inappropriate to take a one-word term and replace it with a 20-word phrase itself full of technical terms. This would only mangle the claims and confound the jury.

In sum, Defendants (1) proposed “electrode,” (2) sought to further construe its construction, and (3) reverts to an entirely different, 20-word construction. These machinations only confirm what Solas has been saying all along. The terms “source” and “drain” should carry their plain meanings, and no further construction is required.

### III. DISPUTED TERMS FOR ’042 PATENT

#### A. “selection period” (’042 patent claim 1)

Solas’s Proposed Construction	HP’s Proposed Construction
time <u>period</u> during which a plurality of pixel circuits is <u>selected</u>	time <u>duration</u> in which a selected selection scan line is <u>kept active</u>

HP’s principal response to Solas’s proposal is that it is a “contrived” “attempt to define ‘selection period’ without reference to a ‘selection scan line.’” Defs. Resp. at 8. But HP’s argument views the term “selection period” in a vacuum, not in view of the claims as a whole. For example, claim 1 requires, among other limitations, “a selection scan driver which sequentially selects said

plurality of selection scan lines in each selection period.” The claims themselves, fully consistent with the specification, state that the selection driver selects “selection scan lines.” It would be redundant and confusing to import “a selection scan line” to the construction of “selection period.”

HP also argues that Solas’s proposal “leads to absurd results” because “at any given time during the operation of a display panel, one row of pixel circuits in the display panel is selected.” Defs. Resp. at 9. But to the extent this argument is understandable, it would also apply to HP’s proposal. Under HP’s own proposal leads to exactly the same result for the same reason—at any given time at least one row of pixel circuits are selected.

To support its construction, HP resorts to misrepresenting the intrinsic record and even Solas’s opening brief. HP represents that “the specification *expressly defines* ‘selection period’ as the time when one corresponding ‘selection scan line’ is selected *and kept active* . . . .” Defs. Resp. at 8 (emphasis added). But not only is this untrue, the phrase “kept active” appears nowhere in the patent. Moreover, HP represents that the specification also defines “other inactive times as a ‘non-selection period’ (red) for that ‘selection scan line.’” *Id.* But the word “inactive” similarly does not occur in the specification. HP then represents to the Court that Solas’s own brief “recognizes that a ‘selection scan line’ is ‘kept active’ when ‘the ‘Von’ voltage . . . is applied to the selection scan line.” Defs. Resp. at 8 (purporting to quote Solas Br. at 18). But this purported quote is found nowhere to be found in Solas’s opening brief. In fact Solas argued the opposite; as Solas explained: “The specification describes the selection scan line is simply ‘selected’ by applying the Von voltage” and thus it is inappropriate to overburden the term with confusing language such as “kept active.” Solas Br. at 18. HP’s repeated mischaracterizations of the specification and Solas’s opening brief only undermines its argument.



Next, HP proposes in a footnote that it is “amenable to substituting ‘kept on’ for ‘kept active’ to address Solas’s objection.” Defs. Resp. at 9, n.3. But as explained in Solas’s opening brief, the specification describes selection scan lines as being “selected,” not “kept on” (or “kept” anything). Further, the specification describes transistors as being turned on and off, not the lines. Solas Resp. at 13–14. HP’s new proposal thus makes little sense in view of the specification and overburdens the term with added unsupported limitations. It fares no better. than “kept active.”

Finally, as to the word “duration” in HP’s proposal, HP argues that “Solas’s proposal, by contrast, places no limit on when a ‘selection period’ can begin or end because it does not specify which ‘plurality of pixel circuits’ is to be selected in this period as discussed above.” Defs. Resp. at 9. But this doesn’t justify why the word “duration,” which appears nowhere in the patent, should replace the word “period,” which occurs over 200 times in the patent.

**B. “sequentially selects said plurality of selection scan lines in each selection period” (’042 patent claim 1)**

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning	selects said plurality of selection scan lines <u>one per each</u> of a plurality of <u>non-overlapping</u> selection periods

HP’s responsive brief asserts, as does its opening brief, that this is a “lengthy, technical phrase that lacks a plain and ordinary meaning outside the context of the ’042 patent.” Defs. Resp. at 11. HP is wrong. As Solas explained, each of the words of the claim phrase is readily understandable and has a plain meaning, both to persons of skill even English speakers. HP identified a 12-word claim phrase for construction. But that HP chose this claim phrase doesn’t justify rewriting the term (and each of the word it contains) inconsistent with its plain meaning.

Indeed, as Solas explained in the opening brief, proposal merely replaces the words “sequentially . . . in” with the phrase “one per each of a plurality of non-overlapping”:

Claim Language	HP's Proposed Construction
<b>sequentially</b> selects said plurality of selection scan lines <b>in</b> each selection period	selects said plurality of selection scan lines <u><b>one per each</b></u> of a plurality of <u><b>non-overlapping</b></u> selection periods

Regardless, by repeating 10 of the 12 claim terms in its proposal, HP effectively concedes, contrary to its arguments in the responsive brief, that these words carry their plain and ordinary meaning. The dispute does indeed turn on the meaning of the term “sequentially.”

HP argues that “every embodiment” in the specification “discloses non-overlapping selection periods . . . .” Defs. Resp. at 11. But HP doesn’t cite any part of the specification for support. If the patentee wanted to require that only one selection scan line can be selected per each of a plurality of non-overlapping selection periods, the patentee could have said so. If that were a feature or requirement of the invention, one would expect it be described in the specification. Instead, the patentee required only “sequential” selection of selection scan line. And as explained in Solas’s opening brief, the meaning of “sequentially” in ordinary English doesn’t impart HP’s added limitations. And adding them unjustifiably overburdens what “sequentially” means. HP does not (and cannot) identify any disclaimer or definition that supports its added limitations.

Nor do HP’s cited cases support adding extraneous limitations to an ordinary term such as “sequentially.” In *Regents of University of Minnesota v. AGA Medical Corp.*, the Federal Circuit affirmed a construction of “affixed” that required 2 separate objects to be connected together. 717 F.3d 929, 934 (Fed. Cir. 2013). The Federal Circuit consulted dictionaries and found that the district court’s construction accorded with the plain meaning of the term “affix” as well as its use in the claims, the specification and the prosecution history. *Id.* at 934–938. Here, HP’s proposed additional limitations are divorced from the plain meaning of “sequentially,” not mandated by the claims themselves, and not required by the specification or prosecution history. HP points merely

to one statement deep in the specification's description of one embodiment. This is far different from *Regents*, which relied on the specification's characterization of "the present invention" to limit the claims. HP's lone citation doesn't characterize "the present invention" or limit the claims.

Likewise, in *ICU Medical, Inc. v. Alaris Medical Systems, Inc.*, the Federal Circuit reviewed a district court's construction of the claim term "spike." 558 F.3d 1368, 1375–76 (Fed. Cir. 2009). That was not a case where, as here, where the patentee proposed that a term with a plain meaning carry that plain meaning. In *ICU Medical*, the patentee proposed "spike" mean merely "an upward projection." In adopting the defendant's proposal the Federal Circuit noted that, particularly in view of patentee's unduly broad proposal, the district court properly required construed "spike" as something more than a mere "upward projection." The Court particularly noted "[patentee] offers no support from any intrinsic or extrinsic source in support of its claim that the ordinary meaning of spike would include a non-pointed structure such as a tube or a straw." *Id.* at 1375. In other words, the patentee failed to substantiate its proposed broadening construction of a claim term "spike." Here, Solas is not attempting to broaden claim terms such as "sequentially" but rather seeks only to afford the term its plain meaning. And that plain meaning is supported by the ordinary English definitions cited in Solas's opening brief.

Notably, both of HP's cases and require understanding terms as they are used in the claims themselves. And HP's responsive brief doesn't rebut Solas's argument that the claims themselves allow the possibility of two or more selection scan lines being selected at once. HP's only objection "such an embodiment would be absurd and fundamentally at odds with the operation of OLED circuits, which select only one selection scan line at a time." This is attorney argument without any citation to evidence. An OLED circuit that selects one selection scan line at a time would still be an OLED circuit. And it is not excluded by the claims.

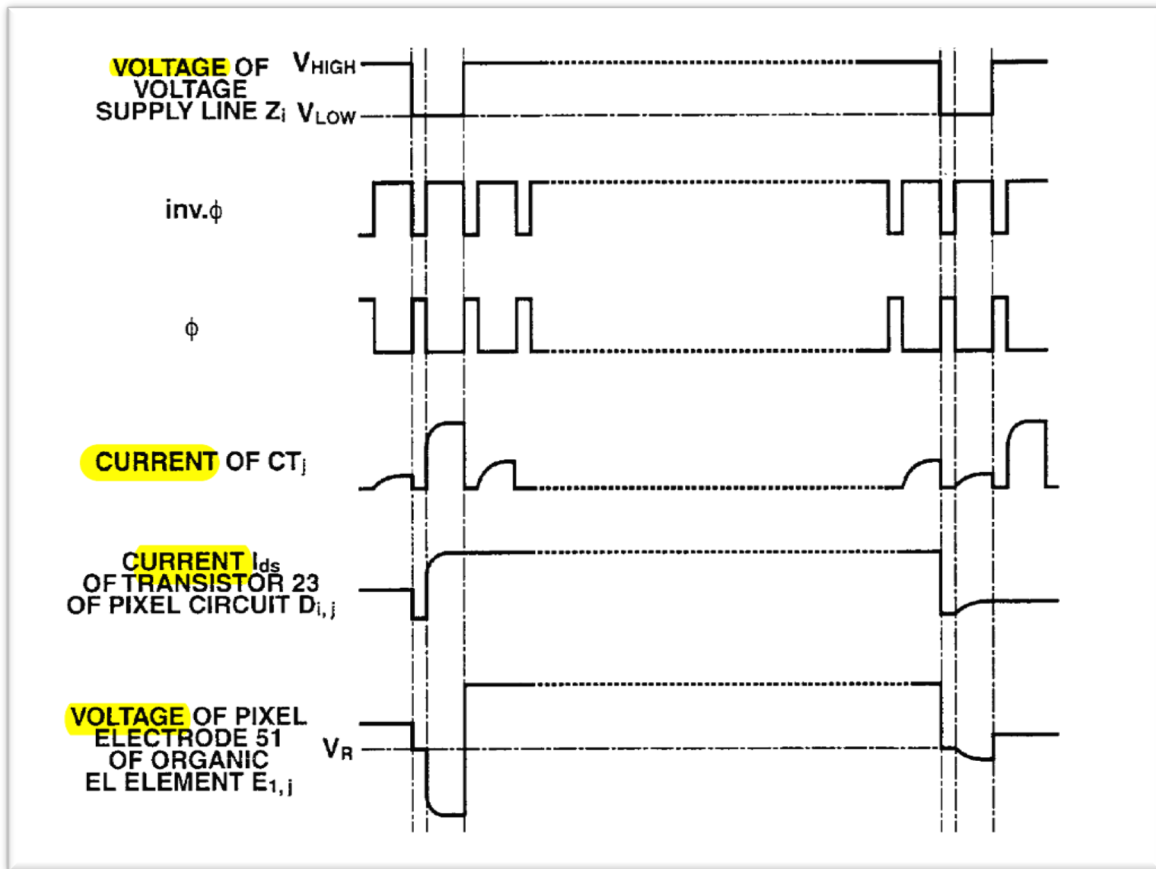
C. “designating current” (’042 patent claim 1)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., current designating a value corresponding to an image signal	current having a <u>specified current value that is held constant</u>

HP argues that the words “designating current” has no plain meaning to a POSITA. But it cites to no expert declaration to counter Solas’s expert declaration to the contrary. To the extent this term requires construction, only Solas’s alternate proposal “current designating a value corresponding to an image signal” accords with the intrinsic record.

HP’s responsive brief fails to address that its proposal is entirely self-contradictory. Both sides agree (and the claims and specification show) that the designating current “correspond[s] to an image signal.” But HP asserts that somehow, this current value, which *changes* with the image signal, must be “held constant.” HP conflates the exercise of construing the designating current (at issue here) with the *application of* the designating current to particular circuits. But even putting aside HP’s confusion, the application of the designating current to a selection scan line is *not* constant. As Solas showed in its opening brief, the ascending current of “CTj” in Figure 9 contradicts HP’s argument that the “designating current” must remain constant, even as applied to a particular circuit. *See* Solas Br. at 21 (annotating Fig. 9).

HP’s responsive brief mischaracterizes Figure 9, arguing that the figure shows only voltage, but not current. Defs. Resp. at 14–15. But the figure explicitly labels “voltage” of lines separately from “current” of other lines (’042 patent Fig. 9 cropped):



HP calls out a sentence describing the “voltage supply line  $Z_i$ ,” and argues that the line shows voltage, not current. *See* Defs. Resp. at 15. But that particular line is separately shown in Figure 9 above. And it is described in the figure as carrying a given voltage (which changes), while the figure explicitly states the “current” of  $CT_j$  is shown. Nothing HP argues changes the fact that Figure 9 discloses a rising designating current during the selection period. At most, the specification describes, for one particular embodiment, that the designating current is held constant for part of a selection period. *See* Defs. Resp. at 15. But that isn’t HP’s proposal which, to the extent understandable, requires a designating current always be constant. Moreover, the specification and claims make clear the designating current changes with image characteristics. Thus, Solas’s proposal for “designating current,” which doesn’t contain unsupported and extraneous limitations should be adopted.

**D. “current lines” (’042 patent claim 1)**

<b>Solas’s Proposed Construction</b>	<b>HP’s Proposed Construction</b>
Plain and ordinary meaning, i.e., conductive lines for carrying current	conductive lines, <u>each connected to a plurality of pixel circuits</u> and carrying current

HP fails to demonstrate that Solas’s proposed construction of plain meaning or “conduct lines for carrying current” needs to be burdened with additional limitations. HP argues that Solas’s construction allows for the possibility that a current line be connected to one pixel circuits and this possibility needs to be specifically foreclosed in the construction of the term. To support its argument, HP argues that “there is no contrary embodiment where each ‘current line’ connects to only one single pixel circuit.” Defs. Resp. at 16. But Solas’s proposal does not *require each* current line connect to only one single pixel circuit. Unlike HP’s proposal, Solas’s proposal accords with the plain meaning of “current lines” and doesn’t impose undue restrictions.

HP’s proposed construction deigns to overburden this term with requirements of how “each” current line must connect to pixel circuits. But, explained in Solas’s opening brief, the claims themselves already cover connection requirements. *See* Solas Br. at 23. The surrounding claim language already requires only “a plurality of pixel circuits which are connected to the plurality of selection scan lines and the plurality of current lines . . .” HP’s proposal goes much further by requiring “each” and every conductive line be connected to a plurality of pixel circuits. HP’s restrictive addition either contradicts or renders superfluous surrounding claim language.

HP’s responsive brief dismisses that its proposed construction of this term is redundant and leaves other claim requirements superfluous. HP relies on the *SimpleAir, Inc. v. Sony Ericsson Mobile Commc’ns AB* case. Defs. Resp. at 16–17. But in *SimpleAir*, the Federal Circuit never said the maxim to avoid construing a claim term to create redundancy, making other claim terms

superfluous is, as HP puts it “weak.” To the contrary, the Federal Circuit reaffirmed that “[i]t is true that ‘interpretations that render some portion of the claim language superfluous are disfavored.’” *SimpleAir, Inc. v. Sony Ericsson Mobile Commc'ns AB*, 820 F.3d 419, 429 (Fed. Cir. 2016) quoting *Power Mosfet Techs., L.L.C. v. Siemens AG*, 378 F.3d 1396, 1410 (Fed.Cir.2004); see also *Merck & Co. v. Teva Pharm. USA, Inc.*, 395 F.3d 1364, 1372 (Fed.Cir.2005). The *SimpleAir* court merely recognized that the avoiding rendering claim terms redundant and/or superfluous “is not an inflexible rule that supersedes all other principles of claim construction.” *SimpleAir, Inc.* 820 F.3d at 429.

Here, HP’s proposed construction of “current lines” runs afoul of multiple canons of claims construction. In addition to rendering terms superfluous and contradicting surrounding claim language, HP’s proposed construction purports to inject from the specification a very restrictive requirement that the “conductive lines” (which both sides agree is appropriate language) “each” must be “connected to a plurality of pixel circuits.” But the patent does not require each and every “conductive line” be connected to a plurality of circuits. HP argues that “there is no contrary embodiment where each ‘current line’ connects to only one single pixel circuit.” Defs. Resp. at 16. But this argument does not support adding the extraneous requirement that “each” and every conductive line *must* connect to a plurality of circuits, as proposed by HP.

HP also, similar to the term above, marshals the *Regents of Univ. of Minn.* and *ICU Medical* cases to try to support its drawing in of limitations from the specification. Defs. Resp. at 16. But HP fails to point to any support in the specification for its requirement that “*each*” and *every* conductive line *must* be connected to a plurality of pixel circuits. Also, unlike the *Regents* and *ICU Medical* cases, HP’s proposal is not consistent with the plain and ordinary meaning of the term to be construed. The Court should adopt Solas’s proposal.

#### IV. DISPUTED TERMS FOR '615 PATENT

##### A. “the operation” ('615 patent claim 11)

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, not indefinite. Within the claim phrase “a drive voltage for making the light emission control section perform the operation,” the term “the operation” refers to "generating a light emission drive current having a predetermined current value in accordance with the electric charges accumulated in the electric charge accumulating section and supplying the light emission drive current to the light emission element.”	Indefinite

The parties’ only dispute is whether the red underlined term, “the operation,” has a reasonably ascertainable meaning in the following context of claim 11:

accordance with display data, a light emission control section for generating a light emission drive current having a predetermined current value in accordance with the electric charges accumulated in the electric charge accumulating section and supplying the light emission drive current to the light emission element, a writing control section for controlling a supplying state of the electric charges based on the gradation sequence signal to the electric charge accumulating section, and a voltage control section for controlling a drive voltage for making the light emission control section perform the operation, respectively;

And, of course it does. The operation of “*the* light emission control section” refers to the function of “*a* light emission control section” recited earlier in the claim. A POSITA would understand this. HP does not (and cannot) show otherwise by clear and convincing evidence.

All of HP’s arguments fail. First, HP reprises its mischaracterization that Solas proposed construction is a “36-word phrase.” Defs. Resp. at 17. But Solas is simply explaining what “the



operation” refers to and why it isn’t indefinite. And nearly all of Solas’s explanation is quoting the claim language itself. Second, HP asserts that “generating” and “supplying” the same light emission drive current must be different operations. *See id.* at 18. But HP provides zero evidence and argument for why they are “different kinds” of operations. To the contrary, they are closely related. For example, a circuit component can supply a current by generating it.

Third, HP makes confusing and convoluted arguments based on the specification. *See id.* at 18–20. They can be rejected for a simple reason. The only dispute between the parties is whether the “the operation” is indefinite for lack of antecedent basis because a POSITA would have no idea what it refers to. But a POSITA *would* know what it refers to, as evidenced by the claim language itself. Importantly, HP has not proposed a construction for “the operation” or any part of the longer claim phrase “generating a light emission drive current . . . and supplying the light emission drive current to the to the light emission element.”

Thus, HP’s various interpretations of these terms based on the specification are detached from the parties’ dispute. The Court can resolve that dispute by finding that “the operation” refers to the previously recited operation of the light emission drive circuit. If that is so, then HP has not proven indefiniteness by clear and convincing evidence. And it ends the inquiry.

**B. “precharge voltage” (’615 patent claim 11)**

<b>Solas’s Proposed Construction</b>	<b>HP’s Proposed Construction</b>
Plain and ordinary meaning	Indefinite

HP’s responsive brief merely repeats arguments from the opening brief. Solas already refuted those arguments in the responsive brief. Briefly, the “precharge voltage,”  $V_{pre}$  and the “drive transistor precharge voltage,”  $V_{pre13}$  are different voltages. Claim 11 is about the former,

V<sub>pre</sub>, and is silent about the latter, V<sub>pre13</sub>. None of the requirements of the “precharge voltage” in the claim is inconsistent with the specification’s description of V<sub>pre</sub>.

For example, HP argues that V<sub>pre</sub> does not exceed the threshold value of the threshold voltage of the drive transistor Tr<sub>13</sub>. Defs. Resp. at 21. But nowhere does the specification require V<sub>pre</sub> to be less than the threshold voltage Tr<sub>13</sub>. HP doesn’t even cite the specification. And there is no inconsistency between the specification and the claims.

Likewise, HP’s arguments about V<sub>pre13</sub> are irrelevant because a POSITA would understand that the claimed “precharge voltage” corresponds to V<sub>pre</sub> in the specification. *See* Flasck Resp. Decl. ¶¶ 15–24. HP’s “amalgamation” argument fails for the same reason. *See* Defs. Resp. at 22. To the extent HP implies that the specification doesn’t adequately teach the “precharge voltage” in claim 11, that sounds like written description or enablement argument. It is not basis to find a term invalid for indefiniteness during claim construction.

**C. “writing control section” (’615 patent claim 11)**

Solas’s Proposed Construction	HP’s Proposed Construction
Plain and ordinary meaning, i.e., circuit section that controls writing	a transistor that controls the writing of both the gradation sequence signal and the precharge voltage from a data line to the charge accumulating section

HP is wrong that “writing control section” does not have a plain meaning. The claim itself makes clear it is a *circuit section* (of the light emission drive circuit) that controls writing. HP’s suggestion that a POSITA would have no idea what it means (as if it could be a couch “section”) ignores the claim language and all relevant context. For the same the reason, a POSITA doesn’t need to look to the specification for an express definition. The patentee is entitled to claim a circuit

section and to specify that it's the section of the circuit that controls writing. Indeed, that is how the patentee claimed all the various “sections” of the light emission drive circuit.

HP's other assertions sound like an unsupported and undisclosed “means-plus-function” argument. *See* Defs. Resp. at 23–24. Apparently, HP wishes that it had proposed that “writing control section” is a means-plus-function term. It never did (probably because the term doesn't recite “means” and a circuit section isn't a nonce term devoid of structure). But even if “writing control circuit” *were* treated as a means-plus-function—which HP never asserted—the corresponding structure would still be all described embodiments *and equivalents thereof*. HP seeks to limit the term to Figs. 3A & 4A (as might be appropriate for means-plus-function claiming) but narrows it even further to exclude equivalents of those structures.

Finally, HP's only justification for loading its proposal with an additional function is that claim 11 already requires it. *See* Defs. Resp. at 23 (arguing “Solas ignores Claim 11's additional recitation . . .”). But that's an argument for *omitting* it from the construction of “writing control section,” not including it. Nowhere does HP show that “writing control section” by itself requires the entirety of HP's 25-word proposed construction.

**D. “data lines” ('615 patent claim 11)**

Solas's Proposed Construction	HP's Proposed Construction
Plain and ordinary meaning, i.e., conductive lines for supplying information	conductive lines, <u>each connected to</u> and carrying data to <u>a plurality of light emission drive circuits</u>

HP attempts to redefine the common technical term “data lines” into a convoluted 16-word phrase. But it does not (and cannot) dispute that (1) “data lines” is a technical term of art, and (2) the '615 patent uses the term in the normal sense. HP's other arguments are meritless.

First, the McGraw-Hill technical dictionary’s definition *is* the plain meaning of data lines. HP’s attack that Solas “conveniently omits” part of the definition is ridiculous. Defs. Resp. at 25. That the definition gives wires or cables as optional examples of data lines (using “*such as*” language) doesn’t undermine its applicability. McGraw-Hill at 490. The entire definition is probative and correct—*especially* in the context of OLED circuits. A data line is an “electrical conductor” used to send information from “one place [of the OLED circuit] to another.” *Id.*

Second, HP falls back to a “disclaimer by implication” argument, apparently adopted from other parts of Defendants’ brief. But the *Univ. of Minnesota* and *ICU Medical* cases are inapposite, as discussed above for the term “supply lines” in the ’068 patent. HP’s disclaimer argument also defies logic. That the patent figures don’t depict data lines connected to exactly two circuits doesn’t mean such data lines are excluded the claim. HP doesn’t identify a single material difference between a data line connected to one circuit versus a data line connected to many.

Third, HP’s proposal of “carrying data” might have more merit if it could find a technical dictionary (or expert opinions) defining data lines in that way. Absent any support, Solas’s proposal of “supplying information” should be adopted. It comes straight from a technical dictionary and is more instructive than HP’s proposal.

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Respectfully submitted,

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### **CERTIFICATE OF SERVICE**

I certify that on July 30, 2020, all counsel of record who are deemed to have consented to electronic service are being served with a copy of this document via the Court's CM/ECF system pursuant to Local Rule CV-5(a)(3)(A).

/s/ Philip X. Wang  
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